VOCATIONAL OBJECTIVES
OF BLIND COLLEGE STUDENTS,
Asenjo and Axelrod

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Chapter Two

a survey of VOCATIONAL OBJECTIVES *of blind college students in the U. S.*

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and
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THERE BEING LITTLE or no systematic information on the vocational objectives of blind college students, the consultant in Vocational Planning of the American Foundation for the Blind in October 1953 instituted a survey designed to yield such information. The data were turned over for analysis to the Department of Research Planning and this paper presents some of the findings. It is expected that these will be of use to specialists in guidance, training and placement of young blind persons who appear to be qualified for academic training beyond the secondary level.

Procedure:

Questionnaires were sent to governmental agencies for blind persons in forty-eight states, the District of Columbia, Hawaii and Puerto Rico. The questionnaire asked for information on the blind students known to the agency who entered college during the academic years 1950 to 1953. Since the returns showed that a plurality of the sample indicated teaching as their vocational choice (see below), information was next sought on several aspects of this profession as it relates to blind persons. (1) State departments of education and state agencies serving blind persons were asked to submit information on blind persons teaching in the public schools of their counties or states. (2) Where name and address were made available of the public school teachers on whom information was obtained in (1) above, these teachers were asked to submit information directly. (3) County superintendents of education in 151 of the most populous counties in the United States were asked to supply information on county ordinances dealing specifically with the effects of blindness on the employability of applicants for teaching positions. (4) From data collected annually by Dr. P. C. Potts, Consultant in Education at the American Foundation, information was tabulated on teachers in residential schools for blind children in the United States.

Results:

Objectives

Of fifty-one agencies contacted, forty supplied data of varying degrees of

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completeness on the vocational objectives of blind college students known to them. Information was completely lacking from agencies in states serving about twenty-five per cent of the population of the United States (1950 census). A source of an indefinite amount of error may lie in the interpretation of the wording of the questionnaire: "Please submit the following data for blind students entering college during the academic years 1950, 1951, 1952 and 1953." Many agencies listed students entering in earlier years, while others interpreted the request literally.

The vocational objectives of the 493

TABLE I

DEGREES OF VISION AND OCCUPATIONAL CHOICES OF 493 BLIND COLLEGE STUDENTS

	DEGREES OF VISION*																				All Degrees		Total
	10		11		12		13		14		15		16-18		20-21		99						
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			M	F	
1. Agriculture	0	0	0	0	1	0	0	0	1	0	2	0	0	0	0	0	0	0			4	0	4
2. Business	1	0	1	0	2	0	0	0	2	0	7	0	1	0	3	0	0	0			20	0	20
3. Sales	0	0	0	0	0	0	0	0	1	0	2	0	1	0	0	0	0	0			4	0	4
4. Insurance	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			2	0	2
5. Public and Industrial Relations	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0			2	2	4
6. Clerical	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0			2	2	4
7. Law	27	1	4	0	3	0	4	0	4	0	6	0	0	0	1	0	0	0			49	1	50
8. Education	27	13	5	3	10	5	6	1	11	8	21	21	0	1	3	4	2	0			85	56	141
9. Music Teaching	8	6	2	4	3	3	0	1	2	1	4	1	0	0	1	1	0	1			20	18	38
10. Home Teaching	1	6	0	1	0	1	0	0	1	1	0	3	0	1	0	0	0	0			2	13	15
11. Counseling	5	0	2	0	2	0	1	0	1	0	1	0	0	0	0	0	1	0			13	0	13
12. Rehabilitation	2	0	0	0	0	0	0	1	0	1	2	2	0	0	0	0	0	0			4	4	8
13. Social Work	3	12	3	4	3	6	2	2	4	1	6	3	1	0	2	2	1	1			25	31	56
14. Physical Therapy, Chiropractic, and Massage	3	0	1	0	2	1	0	0	1	0	1	1	0	0	1	0	0	0			9	2	11
15. Psychology	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0			3	1	4
16. Engineering	2	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0			5	0	5
17. Physical Science	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0			1	1	2
18. Foreign Service	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0			2	0	2
19. Journalism and Writing	5	2	0	2	2	0	0	0	0	0	2	0	0	0	3	0	0	0			12	4	16
20. Music	3	3	4	0	1	0	0	0	2	0	1	0	0	0	0	0	0	1			11	4	18
21. Radio-TV	6	0	0	0	0	0	0	0	1	0	4	0	0	0	0	0	0	0			11	0	11
22. Interpreting	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0			1	2	3
23. Religion	3	0	2	0	3	0	2	0	4	1	4	3	0	0	1	0	0	0			19	4	23
24. Other	0	1	0	0	1	0	1	1	1	2	2	0	0	0	0	0	0	0			5	4	9
25. Undecided	1	1	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0			3	3	6
26. Unknown	7	2	1	2	5	0	2	0	1	0	2	2	0	0	0	0	0	0			18	6	24
TOTALS	112	49	29	16	44	16	18	6	38	20	70	39	4	2	16	7	4	3			335	158	493
	161		45		60		24		58		109		6		23		7						

* 10 = *Absolute blindness*
11 = *Light perception and/or projection*
12 = *Motion to but not including* 5/200
13 = 5/200 *to but not including* 10/200
14 = 10/200 *to but not including* 20/200
15 = 20/200
16-18 = *Peripheral vision limited*
20-21 = *Better than* 20/200, *no limitation of peripheral vision*
99 = *Not reported*
See Kerby[1]

TABLE II

OCCUPATIONAL CHOICE AND TYPE OF HIGH SCHOOL ATTENDED OF 425 BLIND COLLEGE STUDENTS WHO ATTENDED EITHER RESIDENTIAL OR NON-RESIDENTIAL HIGH SCHOOLS, BUT PRESUMABLY NOT BOTH.

	TYPE OF SCHOOL			
	RESIDENTIAL		OTHER	
	Number	Per Cent	Number	Per Cent
1. Agriculture	1	1	3	1
2. Business	4	2	16	7
3. Sales	0	—	4	2
4. Insurance	2	1	0	—
5. Public and Industrial Relations	1	1	3	1
6. Clerical	1	1	3	1
7. Law	20	10	23	10
8. Education	51	28	55	21
9. Music Teaching	27	14	8	3
10. Home Teaching	1	1	11	5
11. Counseling	6	3	6	3
12. Rehabilitation	2	1	6	3
13. Social Work	21	11	30	13
14. Physical Therapy, Chiropractic, and Massage	6	3	4	2
15. Psychology	0	—	4	2
16. Engineering	0	—	5	2
17. Physical Science	1	1	1	—
18. Foreign Service	0	—	2	1
19. Journalism and Writing	5	3	9	4
20. Music	9	5	9	4
21. Radio-TV	7	4	3	1
22. Interpreting	1	1	1	—
23. Religion	9	5	13	6
24. Other	4	2	5	2
25. Undecided	1	1	3	1
26. Unknown	10	5	5	2
Total	193	—	232	—

students on whom we have data, and their degrees of vision, are given in Table I*. The classification of vocational choices was developed through inspection of the data; the breakdown of degrees of vision is based on that recommended by the Committee on Statistics of the Blind and used generally in the Foundation[1].

With regard to the latter classification, it should be pointed out that, in some cases, visual acuity was reported to us in fractional form with other than 200 feet in the denominator; such cases were assigned to categories in our classification within whose range the fractions fell when converted to percentages. Thus, 10/100 would be equivalent to 20/200. This puts the emphasis on visual angle, which is perhaps not entirely satisfactory[2], but in view of the small number of cases in which this procedure was necessary it is felt that too great an inaccuracy is not involved.

The most striking finding is the large number of students who indicate a desire to become teachers. Of 469 whose occupational choice is known, 141 (thirty per cent) have chosen this field. Next highest are social work (twelve per cent) and law (eleven per cent). Table II reveals what to us was a surprising finding: of 425 students for

* *One large state supplied little more than the names of sixty-one students. This group is not included in any of the tables here presented.*

TABLE III

SEX, DEGREE OF VISION AND CLASSES TAUGHT BY 41 BLIND PUBLIC SCHOOL TEACHERS.

		CLASSES TAUGHT						
		Preschool	Elementary	Jr. Sr. H. S.	Handicapped	Unknown	All Classes	Total
Totally blind	M	—	1	2	—	—	3	5
	F	—	—	1	1	—	2	—
Light perception	M	—	—	4	—	—	4	5
	F	—	—	1	—	—	1	—
Movement—4/200	M	—	—	1	—	—	1	3
	F	—	1	—	1	—	2	—
5/200—9/200	M	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—
10/200—19/200	M	—	—	2	—	—	2	5
	F	—	2	1	—	—	3	—
20/200	M	—	1	4	—	—	5	12
	F	1	4	2	—	—	7	—
Unknown	M	—	—	4*	1	1	6	11
	F	—	4	—	1	—	5	—
All degrees	M	—	2	17	1	1	21	41
	F	1	11	5	3	—	20	—
Total		1	13	22	4	1	41	—

* Includes one principal.

whom appropriate data are available, the occupational choices were essentially similar whether they attended residential high schools or other types of schools. The largest discrepancy is that between the percentages of the two types of high school graduate who indicated a desire to become music teachers; this is understandable in view of the generally greater emphasis placed on music in residential schools.

Employability as Teachers

In view of the large percentage of students listing teaching as their objective, information bearing on their chances for employment would be helpful. Jernigan[3] reported in 1955 that of 153 counties and city school districts in California to which inquiries were directed, 111 replied to the query "Does your school district now have in its employ any elementary or secondary teachers who are blind?" The responses were unanimously negative, although Jernigan refers to an unspecified but small number recently hired for public school classes. Further, in these 111 districts only three applications for employment had been received from blind persons in the five years preceding the date of the questionnaire. In response to our inquiries, forty-six state departments of education and/or state agencies serving blind persons, and the agency in the District of Columbia, reported known to them a total of fifty-four blind teachers in their public schools.

It is likely that there are more employed blind teachers than the fifty-four made known to us. Thus, the department of education of one large eastern state pointed out that since their records are not arranged by physical

status, such information was not accessible. Further, the possible ambiguity of the term "blind" may in some cases have led departments of education to exclude all but totally blind or light-perception cases. In addition there is reason to believe that some teachers, not reported to us, may be functioning within the legal definition of blindness without the knowledge of either the departments or agencies of their states.

Information on sex, classes taught, and degree of vision of forty-one blind teachers in public schools appears in Table III. The numbers are rather small and allow for no clear-cut interpretation. However, it is perhaps significant that fourteen of the forty-one (thirty-four per cent) teach in the elementary grades, where problems of discipline are most often cited as disqualifying blind persons from teaching.

Data on age at onset of blindness and teaching experience of nineteen teachers for whom information was available are tabulated in Table IV. Again, the data are few, but note that of eighteen for whom age at onset is known, fourteen (seventy-eight per cent) were hired after onset without previous public school experience.

Although there are probably more

TABLE IV

AGE AT ONSET AND TEACHING EXPERIENCE OF 19 BLIND PUBLIC SCHOOL TEACHERS.

Teacher	Onset	Years Taught Pre-Blind	Years Taught Post-Blind	Total Years Teaching
1.	0	0	1	1
2.	0	0	1	1
3.	0	0	1	1
4.	0	0	1.5	1.5
5.	0	0	1.5	1.5
6.	0	0	3	3
7.	0	0	3	3
8.	0	0	4	4
9.	0	0	6	6
10.	1	0	5	5
11.	5	0	3	3
12.	6	0	1	1
13.	15	0	20	20
14.	21	0	3	3
15.	28	6	2	8
16.	30	3	17	20
17.	38	13	1	14
18.	41	20	5	25
19.	unknown	unknown	unknown	6

TABLE V

SUMMARY OF RESPONSES FROM 88 COUNTY SUPERINTENDENTS OF EDUCATION REGARDING ORDINANCES BEARING ON EMPLOYABILITY OF BLIND APPLICANTS.

Category	Number	
A	1	Ordinance prohibits hiring.
B	8	No written ordinance, but (a) application requires listing of physical handicaps, and/or (b) vision test required, and/or (c) physical fitness required.
C	8	No written ordinance, but blind persons not hired.
D	60	No written ordinance; no further information.
E	2	No written ordinance; declined to state hiring policy.
F	5	No written ordinance, but must demonstrate no loss in efficiency.
G	9	Reply unclear.

TABLE VI

SEX AND VISUAL STATUS OF 1114 TEACHERS IN RESIDENTIAL SCHOOLS FOR BLIND CHILDREN.

	MALE		FEMALE		TOTAL	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Sighted	224	20.1	629	56.5	853	76.6
Blind	134	12.0	127	11.4	261	23.4
Total	358	32.1	756	67.9	1114	100.0

TABLE VII

GRADES AND SUBJECTS TAUGHT BY 261 BLIND AND 853 SIGHTED TEACHERS IN RESIDENTIAL SCHOOLS FOR BLIND CHILDREN IN THE UNITED STATES[a].

	Sighted Female	Sighted Male	Blind Female	Blind Male	Total
Kindergarten and Preschool[b]	61	—	1	—	65
Elementary[c]	303	31	60	31	428
Jr. and Sr. High School[d]	27	18	5	6	56
Grade Unknown[e]	7	—	—	—	7
Arts and Crafts	16	3	3	2	24
Braille	13	1	18	6	38
Commercial	17	1	—	1	22
Deaf-Blind	12	2	1	—	15
English	32	12	6	8	58
Guidance, Counseling and Psychology	3	11	—	3	17
Home Economics	58	—	1	—	59
Language	12	8	2	3	25
Librarian	13	3	5	1	22
Mathematics	13	15	6	10	44
Music	71	40	32	25	171
Physical Education and Travel	40	33	6	13	92
Piano Tuning and Repair	—	4	—	25	29
Science	12	16	1	7	36
Shop and Manual Training	11	41	3	36	91
Social Studies	19	18	2	15	54
Speech	8	1	2	—	11
Typing	33	6	1	—	40
Ungraded	15	2	6	5	28
Supervisory[f]	16	19	1	6	42
Other	10	10	4	4	28

[a] *Since many teachers were reported as teaching more than one grade and/or subject, only rows have unambiguous meaning. E.g., of 24 teachers reported as teaching Arts and Crafts, 16, 3, 3 and 2 were sighted female, sighted male, blind female and blind male, respectively.*

[b] *Includes kindergarten, pre-school, and nursery classes.*

[c] *Grades 1-8.*

[d] *Grade unspecified.*

[e] *Sight-saving classes.*

[f] *Includes deans, supervising teachers, et al., but excludes principals.*

than fifty-four blind teachers in the public schools, the total number must be rather small; this should be of some interest to vocational counselors and blind students. On the other hand, it obviously has been possible for some blind persons, adequately trained, to obtain teaching positions. While we have no comparable figures for sighted teachers, something of the "staying power" of the eighteen teachers on whom data are available is represented in Table IV ("Years taught post-blind"). The median number of years is about three. Unfortunately, the wording of the inquiries allowed equivocal responses; we cannot determine how many schools are represented in any one respondent's experience.

Of 151 county superintendents of education, eighty-eight replied to our query concerning ordinances affecting the employability of blind applicants for teaching positions (Table V). It is entirely possible that selective factors operated to make the percentage of counties reporting that blindness disqualifies applicants smaller than would have been the case had all superintendents responded; there may have been some hesitancy in reporting such restrictions.

Note that eighty-three counties (ninety-four per cent of those replying) have no written ordinances. This is not to say, however, that otherwise qualified blind persons would be hired. We have no knowledge of how the information obtained under (a) and (b) in category B is acted upon by these counties, nor whether "physical fitness" is construed as including absence of uncomplicated blindness. Category C is self-explanatory. Two counties (category E) simply stated that no policy has been adopted. "Loss in efficiency" (category F) is another ambiguous term. Finally, sixty counties simply wrote that they have no written ordinances (category D); whether blind applicants would be considered remains uncertain.

Tables VI and VII summarize available information on 1114 teachers, blind and sighted, in residential schools for blind children for the school year 1954-1955. Only one school in the continental United States is not represented in these tabulations. From Table VII it can be seen that blind teachers are represented, though in some cases minimally, in all classes except sight-saving.

Other Fields:

It would be convenient to have systematic information on the employment possibilities in many fields. Such information is, however, almost totally lacking. The Study Group of Professional Social Workers in Agencies for the Blind has collected data bearing on the training and employment of blind social workers in agencies for the blind and in non-specialized agencies[4]. These data have not yet been analyzed. Hyde[5] has edited a series of papers on law as a profession for the blind; this consists of advice from successful blind men in the field to blind prospective lawyers on building a practice and on techniques which might be useful to such persons.

A comprehensive analysis of many individual employment fields would appear to be out of the question. It seems both more realistic and more meaningful to attempt to determine the degree of success which blind college graduates have had in obtaining employment in fields for which college education presumably prepared them. Buell[6] and Fitting[7] have studied groups of former students of two residential schools with respect to occupational status, but so far as we know, no similar investigation of former college students has been reported. The American

Foundation for the Blind is contemplating a follow-up of the student sample described in this paper which will be designed to elicit this kind of information. If the study materializes, the results will appear in this journal.

Summary:

Summaries are presented of information gathered via questionnaires on vocational objectives of blind college students in the United States and on several topics related to sub-college teaching as a profession for blind persons. The possibility of a follow-up study of the employment status of the blind students who formed the subject sample of this survey was mentioned.

REFERENCES

1. Kerby, C. Edith, *Manual on the Use of the Standard Classification of Causes of Blindness.* Prepared for the Committee on Statistics of the Blind. American Foundation for the Blind and National Society for the Prevention of Blindness, 1940. 26 pp.
2. "Estimation of Loss of Visual Efficiency." AMA *Archives of Ophthalmology,* 54, 1955. pp. 462-468.
3. Jernigan, K., *The Blind in the Teaching Profession.* Mimeographed. California Council for the Blind (2506 Shattuck Avenue, Berkeley 4). 1955. 15 pp.
4. Raskin, Nathaniel J. and Weller, Marian F., *Current Research in Work for the Blind.* American Foundation for the Blind Research Series, 1, 1953. 34 pp.
5. Hyde, James F. C., ed., *Law as a Profession for the Blind.* American Foundation for the Blind Vocational Series, 1, 1954. 67 pp.
6. Buell, Josephine, "Employment Status of Former Pupils of the California School for the Blind." *Exceptional Children,* 23, 1956. pp. 102-103.
7. Fitting, Edward A., "Rehabilitation Status of Former Students of the Michigan School for the Blind." *New Outlook for the Blind,* 49. 1955. pp. 21-26.

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